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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,239	06/19/2001	Keisuke Chino	07409.0022	9556
22852	7590	12/19/2003	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			WILSON, DONALD R	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

eb14

Office Action Summary

Application No.

09/883,239

Applicant(s)

CHINO ET AL.

Examiner

Donald R Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) 4,7 and 14-156 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-11,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and declarations filed 10/29/03, have been fully considered with the following results.
2. The amendment overcomes the rejections under 35 U.S.C. § 112, second paragraph, and the rejections are withdrawn.
3. The amendment and declarations are deemed to be persuasive in overcoming the prior art rejections which are withdrawn.

Previously Cited Statutes

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

5. **Claims 1-3, 5, 6, 8-11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benfameo, Nalesnick or Auda.**

6. Benfameo discloses polyolefin compositions containing side chain carboxylic functions which have been derivatized with amines (col. 2, lines 22-27). The polyolefins specifically include ethylene propylene copolymers containing 0.1 to 10 mole% of a non-conjugated diene among which ethylenenorbornene is a representative example (col. 3, lines 45-63 and col. 4, lines 52-61). This makes the base copolymers of the present claims readily envisaged. Derivatization with maleic anhydride is a preferred method of introducing the carboxylic functionality (col. 5, lines 3-17). A number of both 5-membered and 6-membered ring nitrogen heterocycles are disclosed as amines to be reacted with the grafted maleic anhydride (col. 6, line 16-65). Similar teachings may be found in Nalesnick (see cols. 3-7).

7. Auda discloses multiple reactions on polymer melts, one example of which is maleation of a polyolefin followed by imidization (col. 3, lines 10-18 and col. 6, lines 13-16). A preferred example of polymer is an ethylene-propylene copolymer containing 0.5 to 10 wt.% diene, such as VISTALON®4608 containing ethylenenorbornene as the diene (col. 7, line 65 to col. 8, line 18). Grafting with maleic

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anhydride is a preferred method of introducing the carboxylic functionality (col. 10, lines 19-32). A number of compounds taught to be reactive with the grafted copolymers include both 5-membered and 6-membered ring nitrogen heterocycles (col. 10, line 63 to col. 12, line 44).

Obviousness Double Patenting Rejection

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

9. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

10. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. **Claims 1-3, 5, 6, 8-11, 16 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-12 of U.S. Patent No. 6,512,051.** Although the conflicting claims are not identical, they are not patentably distinct from each other for reasons which were discussed in the previous Office Action, Detailed Action § 14. Specific reference to the nitrogen containing five-membered group may be found in Claim 9, and would also have been obvious over the reference to heterocyclic amine groups in both Claims 7 and 9.

Art of Interest/Technological Background

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Camberlin, and as indicated earlier Onizawa, may also be references which could be used to reject non-elected species of the invention.

Other Comments

13. Upon filing of a terminal disclaimer, Claims directed to the elected specie would be allowable. The search and examination has been extended to other species of the nitrogen containing heterocycle group.

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Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R Wilson whose telephone number is 703-308-2398 (571-272-1113).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450 (571-272-1114). The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029 (571-273-1113).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

The Examiner is expected to move to the new Office about Christmas time. New telephone numbers known to the Examiner are indicated in parentheses.



Donald R Wilson
Primary Examiner
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